

## REMARKS

In response to the rejections of the claims under 35 USC 112 and 101 and the objection to claim 2, applicants have cancelled the original claims in this application and replaced them with new claims 8-16. The claims have been recast as method of use claims consistent with the "use" language in the claims as filed. Applicants respectfully disagree with the Examiner's statement on page 4 of the Action that the claims "will be treated on the merits herein, as method of manufacture claims." It is evident from the claims as filed that they are not directed to a method of making a composition, but instead to a method of using the composition, and the entirety of the disclosure is directed toward a method of treating mastocarcinoma by using a steroidal aromatase inhibitor. Applicants respectfully submit that the Examiner's treatment of the claims as filed in this application should in no way control their characterization by applicants herein and that applicants may properly present method of use claims in this application by the amendments above. Since the amendments above overcome the rejections of the claims under 35 USC 112, second paragraph, and 35 USC 101, those rejections should be withdrawn. The objection to claim 2 has likewise been overcome by presenting claim 9 without parentheses.

Claims 1, 2, 6 and 7 were rejected as anticipated by Messenger. This rejection is respectfully traversed since Messenger does not teach or suggest to persons of ordinary skill in the art that mastocarcinoma may be treated in accordance with the claimed method, but is instead directed to the treatment and prevention of hair loss. Although the Messenger disclosure refers to topical application of aromatase inhibitor, there is no suggestion in Messenger whatever to use aromatase inhibitor, steroidal or otherwise, in effective amounts against mastocarcinoma by topical administration locally in the vicinity to treat or prevent mastocarcinoma. The rejection of the claims on Messenger should, therefore, be withdrawn.

Claims 3-5 were rejected under 35 USC 103 on the combination of Brodie in view of Messenger and Hanson. On page 5 of the Action, the Examiner characterized Brodie as disclosing a pharmaceutical formulation of a steroidal aromatase inhibitor administered to a host for sustained release. The Examiner cited Messenger as teaching a process of making a topical

formulation of any known steroidal aromatase inhibitor that contains no antigestagens. Hanson was cited as teaching that DMSO is useful as a penetration promoting agent in the local administration of drugs. This rejection is respectfully traversed.

The Examiner admits that Brodie, the starting point for this rejection, does not teach the use of topical formulations. Brodie directs persons of ordinary skill in the art away from the invention of this application by teaching the sustained release administration of steroidal aromatase inhibitors systemically so as to achieve serum levels sufficient to produce the therapeutic effects disclosed in Brodie. Brodie does, indeed, disclose treatment of mammary tumors, but Brodie suggests strongly that systemic administration is necessary for the treatment to be effective.

The addition of Messenger and Hanson does nothing to complete a *prima facie* case of obviousness. Persons of ordinary skill in the art would not have been motivated by Messenger to administer steroidal aromatase inhibitors topically for treatment of mammary carcinoma. Persons skilled in the art of cancer treatment are not motivated to refer to methods of treating and preventing hair loss as being of use in treating cancer. Furthermore, there is no basis within Brodie itself to see any motivation to administer a steroidal aromatase inhibitor in a manner other than systemically. When administering the inhibitor systemically as taught by Brodie, one must built up a certain serum level so as to achieve a sufficient concentration of the active ingredient at the desired locus. That Hanson might show that DMSO is known as a penetration aid does not add significantly to the disclosures of Brodie and Messenger.

Applicants also respectfully submit that even if a person of ordinary skill in the art might have had some motivation to try combining the disclosures of Brodie and Messenger, which is not the standard for supporting an obviousness rejection, the combined disclosures would still not have made obvious to the persons of ordinary skill in the art the claimed local application of the topical formulation which is essential to avoid systematic side effects in this invention. Topical application is not necessarily a local application. Some of the prior art of record in this application, in fact, discloses transdermal administration of medicaments using patches that

results in transport of the active ingredients through the skin to the blood stream. Accordingly, it would not have been obvious to persons of ordinary skill in the art to apply a steroid aromatase inhibitor topically for the treatment of mastocarcinoma locally to the area requiring prophylaxis or treatment where the method is carried out so as to avoid systematic action of the steroid aromatase inhibitor.

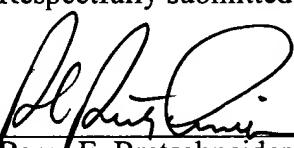
For the foregoing reasons, early action allowing the claims in this application is solicited.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 246472001600. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

By:

  
Barry E. Bretschneider

Registration No. 28,055

Dated: August 24, 2001

Morrison & Foerster LLP  
2000 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006-1888  
Telephone: (202) 887-1545  
Facsimile: (202) 263-8396

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification:**

Please insert the Abstract of the Disclosure set forth on the attached sheet.

**In the Claims:**

Please cancel claims 1-7 without prejudice or disclaimer and replace them with the following new claims 8-16:

8. A method for the prophylaxis or treatment of mastocarcinoma, comprising topically applying a therapeutically or prophylactically effective amount of a medicament comprising a steroid aromatase inhibitor as an active ingredient locally to an area on the body of a patient in need of prophylaxis or treatment of mastocarcinoma, wherein the medicament contains no antigestagens and wherein the method is carried out so as to avoid systemic action of the active ingredient.

9. The method according to claim 8, wherein the medicament comprises 4-hydroxyandrost-4-ene-3,17-dione or a pharmacologically active derivative thereof as an active ingredient.

10. The method according to claim 8, wherein the medicament comprises 4-O-acetylandrost-4-ene-3,17-dione as an active ingredient.

11. The method according to claim 8, 9 or 10, wherein the medicament further comprises a substance for promoting skin penetration.

12. The method according to claim 8, 9 or 10, wherein the medicament comprises DMSO.

13. The method according to claim 8, 9 or 10, wherein the medicament is formulated as an ointment, cream, gel, emulsion or lotion.

14. The method according to claim 13, wherein the active compound content is 0.0001-20% by weight.

15. The method according to claim 13, wherein the active compound content is 0.6-10% by weight.

16. The method according to claim 13, wherein the active compound content is 1-5% by weight.